AMENDMENTS TO THE CLAIMS

Please find below a listing of claims that will replace all prior versions, and listings, of claims in the application:

1. *(previously presented)* A variable bandwidth transmission device comprising:
   a) a first input for receiving a message bearing signal characterized by a bandwidth that is variable;
   b) a second input for receiving a bandwidth control signal characterized by a frequency, the frequency being variable as a function of the bandwidth of the message bearing signal;
   c) a filtering stage for processing the message bearing signal and the bandwidth control signal to generate an output signal characterized by a bandwidth, said filtering stage being responsive to a change of frequency of the bandwidth control signal to alter the bandwidth of the output signal;
   d) a bandwidth control signal source connected to said second input for supplying the bandwidth control signal; and
   e) control logic coupled to said bandwidth control signal source, said control logic being operative for detecting a change of the bandwidth of the message bearing signal and for causing said bandwidth control signal source to change the frequency of the bandwidth control signal on a basis of the detected change.

2. *(previously cancelled)*

3. *(previously presented)* A variable bandwidth transmission device as defined in claim 1, wherein said filtering stage is characterized by a Nyquist bandwidth, said filtering stage being responsive to a change of frequency of the bandwidth control signal to alter the Nyquist bandwidth of said filtering stage.

4. *(previously presented)* A variable bandwidth transmission device as defined in claim 3, wherein said filtering stage includes a first spectral shaping filter and a second spectral shaping filter.

5. *(original)* A variable bandwidth transmission device as defined in claim 1, wherein said filtering stage includes band pass filters.

6. *(original)* A variable bandwidth transmission device as defined in claim 5, wherein said filtering stage includes a first mixer having two inputs and an output, the output of said first mixer being coupled to an input of a first band pass filter, one input of said first mixer being coupled to said first input for receiving the message bearing signal, the other input of said first mixer receiving a signal at a first frequency.

7. *(previously presented)* A variable bandwidth transmission device as defined in claim 6, wherein said filtering stage includes a second mixer having two inputs and an output, one input of said second mixer being coupled to an output of said first band pass filter, the other input of said second mixer receiving a signal at a second frequency, the output of said second mixer being coupled to an input of a second band pass filter.

8. *(previously presented)* A variable bandwidth transmission device as defined in claim 7, wherein said filtering stage includes a third mixer having two inputs and an output, one input of said third mixer being coupled to an output of said second band pass filter, the other input of said mixer receiving the signal at the first frequency, the output of said second mixer generating the output signal characterized by a bandwidth.

9. *(previously presented)* A variable bandwidth transmission device as defined in claim 7, wherein said filtering stage includes a Digital to Analog converter including a first input for receiving the output of said second band pass filter, a second input for receiving the signal at the first frequency and an output for releasing the output signal

characterized by a bandwidth, the output signal characterized by a bandwidth being an analog signal.

10. *(previously presented)* A variable bandwidth transmission device as defined in claim 9, wherein said Digital to Analog converter is characterized by a sampling frequency, the first frequency defining the sampling frequency of said Digital to Analog converter.

11. *(original)* A variable bandwidth transmission device as defined in claim 7, including a local oscillator manager including a local oscillator generating a local oscillator signal, said local oscillator manager being operative to generate from the local oscillator signal and from the bandwidth control signal the signal at the first frequency and the signal at the second frequency.

12. *(original)* A variable bandwidth transmission device as defined in claim 11, wherein said local oscillator manager includes a mixer having two inputs for receiving the bandwidth control signal and the local oscillator signal, respectively and two outputs, coupled respectively to a first band pass filter and to a second band pass filter.

13. *(original)* A variable bandwidth transmission device as defined in claim 12, wherein the first band pass filter outputs a signal that is the sum of the frequency of the local oscillator signal and the frequency of the bandwidth control signal.

14. *(original)* A variable bandwidth transmission device as defined in claim 12, wherein said local oscillator manager includes a frequency divider receiving the signal output by said first band pass filter, said frequency divider outputting the signal at the first frequency.

15. *(original)* A variable bandwidth transmission device as defined in claim 14, wherein said frequency divider divides the frequency of the signal output by said first band pass filter by two.

16. *(original)* A variable bandwidth transmission device as defined in claim 13, wherein the second band pass filter outputs the signal at the second frequency that is the difference between the frequency of the local oscillator signal and the frequency of the bandwidth control signal.

17. *(previously presented)* A variable bandwidth transmission device as defined in claim 11, wherein said local oscillator manager includes a single side band up converter.

18. *(previously presented)* A variable bandwidth transmission device as defined in claim 17, wherein said oscillator manager includes a pair of single side band up converters, each single side band up converter receiving as input the local oscillator signal and the bandwidth control signal, one of the single side band up converters releasing a signal at a frequency that is the sum of the frequency of the local oscillator signal and the frequency of the bandwidth control signal and the other single side band up converter releasing a signal at a frequency that is the difference between the frequency of the local oscillator signal and the frequency of the bandwidth control signal.

19. *(previously cancelled)*

20. *(previously presented)* A variable bandwidth transmission device as defined in claim 1, wherein the frequency of the bandwidth control signal is related to the bandwidth of the message bearing signal by a function f(X) where "X" is the bandwidth of the message bearing signal, said function being selected from the group consisting of:

a) $f(X) = A + X$, where A is a constant;

b) $f(x) = B * X$, where B is a constant; and

c) $f(X) = C * (D + X)$, where C and D are constants.

21. *(previously presented)* A variable bandwidth transmission device comprising:

a) a first input for receiving a message bearing signal characterized by a bandwidth that is variable;

b) a second input for receiving a bandwidth control signal characterized by a frequency, the frequency being variable as a function of the bandwidth of the message bearing signal;

c) means for processing the message bearing signal and the bandwidth control signal to generate an output signal characterized by a bandwidth, said means being responsive to a change of frequency of the bandwidth control signal to alter the bandwidth of the output signal;

d) means connected to said second input for supplying the bandwidth control signal; and

e) means for detecting a change of the bandwidth of the message bearing signal and for causing said means for supplying the bandwidth control signal to change the frequency of the bandwidth control signal on a basis of the detected change.

22. *(cancelled)*

23. *(previously presented)* A variable bandwidth reception device comprising:

a) a first input for receiving a message bearing signal characterized by a bandwidth that is variable;

b) a second input for receiving a bandwidth control signal characterized by a frequency, the frequency being variable as a function of the bandwidth of the message bearing signal;

c) a filtering stage for processing the message bearing signal and the bandwidth control signal to generate an output signal characterized by a bandwidth, said filtering stage being responsive to a change of frequency of the bandwidth control signal to alter the bandwidth of the output signal;

d) a bandwidth control signal source connected to said second input for supplying the bandwidth control signal; and

e) control logic coupled to said bandwidth control signal source, said control logic being operative for detecting a change of the bandwidth of the message bearing signal and for causing said bandwidth control signal source to change

the frequency of the bandwidth control signal on a basis of the detected change.

24. *(previously presented)* A variable bandwidth reception device as defined in claim 23, wherein said filtering stage is a spectral shaping filtering stage that includes a first spectral shaping filter and a second spectral shaping filter.

25. *(previously presented)* A variable bandwidth reception device as defined in claim 23, wherein said filtering stage includes band pass filters.

26. *(original)* A variable bandwidth reception device as defined in claim 25, wherein said filtering stage includes a first mixer having two inputs and an output, the output of said first mixer being coupled to an input of a first band pass filter, one input of said first mixer being coupled to said first input for receiving the message bearing signal, the other input of said first mixer receiving a signal at a first frequency.

27. *(previously presented)* A variable bandwidth reception device as defined in claim 26, wherein said filtering stage includes a second mixer having two inputs and an output, one input of said second mixer being coupled to an output of said first band pass filter, the other input of said second mixer receiving a signal at a second frequency, the output of said second mixer being coupled to an input of a second band pass filter.

28. *(previously presented)* A variable bandwidth reception device as defined in claim 27, wherein said filtering stage includes a third mixer having two inputs and an output, one input of said third mixer being coupled to an output of said second band pass filter, the other input of said mixer receiving the signal at the first frequency, the output of said second mixer generating the output signal characterized by a bandwidth.

29. *(previously presented)* A variable bandwidth reception device as defined in claim 27, wherein said filtering stage includes an Analog to Digital converter including a first

input for receiving the output of said second band pass filter, a second input for receiving the signal at the first frequency and an output for releasing the output signal characterized by a bandwidth, the output signal characterized by a bandwidth being a digital signal.

30. *(previously presented)* A variable bandwidth reception device as defined in claim 29, wherein said Analog to Digital converter is characterized by a sampling frequency, the first frequency defining the sampling frequency of said Analog to Digital converter.

31. *(previously presented)* A variable bandwidth reception device as defined in claim 27, including a local oscillator manager including a local oscillator generating a local oscillator signal characterized by a frequency, said local oscillator manager being operative to generate from the local oscillator signal and from the bandwidth control signal the signal at the first frequency and the signal at the second frequency.

32. *(original)* A variable bandwidth reception device as defined in claim 31, wherein said local oscillator manager includes a single side band up converter.

33. *(previously presented)* A variable bandwidth reception device as defined in claim 32, wherein said local oscillator manager includes a pair of single side band up converters, each converter receiving as input the local oscillator signal and the bandwidth control signal, one of the single side band up converters releasing a signal at a frequency that is the sum of the frequency of the local oscillator signal and the frequency of the bandwidth control signal and the other single side band up converter releasing a signal at a frequency that is the difference between the frequency of the local oscillator signal and the frequency of the bandwidth control signal.

34. *(previously cancelled)*

35. *(currently amended)* A variable bandwidth reception [[~~transmission~~]] device as defined in claim 23, wherein the frequency of the bandwidth control signal is related to the bandwidth of the message bearing signal by a function f(X) where "X" is the bandwidth of the message bearing signal, said function being selected from the group consisting of:

a) f(X) = A + X, where A is a constant;

b) f(X) = B * X, where B is a constant; and

c) f(X) = C * (D + X), where C and D are constants.

36. – 38. *(previously cancelled)*